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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/593,938

09/22/2006

Gunter Richter

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EXAMINER

LEYSON, JOSEPH S

ART UNIT

PAPER NUMBER

1791

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/593,938	<b>Applicant(s)</b> RICHTER, GUNTER	
	<b>Examiner</b> JOSEPH LEYSON	<b>Art Unit</b> 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 25-49 is/are pending in the application.
- 4a) Of the above claim(s) 39 and 49 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-38 and 40-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/22/06</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Species A, drawn to claims 35-38 and 45-48, in the reply filed on May 5, 2009 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 39 and 49 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse as mentioned above.

### ***Specification***

3. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.

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- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

### ***Claim Objections***

4. Claim 42 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

The first angle being about 0 degrees, as recited by claim 41, is the same thing as the inner surface being configured as a cylindrical surface, as recited by claim 42 which is dependent upon claim 41 (see instant specification p. 11, lines 2-4).

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 27, 28, 30, 31, 34 and 44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 27, the phrase "preferably" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim 30 recites "the first cylindrical rings" which lacks antecedent basis making it unclear to what it refers. The examiner suggests including the limitations of claim 25 which first recites the first cylindrical rings.

Claims 34 and 44 recites "the elastic baffle" which lacks antecedent basis making it unclear to what it refers.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 25-28 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter (US 4,937,035) in view of Smith (US 5,262,119).

Richter (US 4,937,035) discloses a device for producing multilayer, coextruded, tubular preforms made of thermoplastic material, with a coextrusion head with several essentially coaxially arranged flow channels (4.A, 4.B, 4.C), each of which is fed from an individual inlet opening (4.1A, 4.1B, 4.1C) with a material melt, which is annularly distributed in a distributor ring (not labeled but shown in the figs. 1 and 3; for example "C" in fig. 3 points to a distributor ring but "C" is disclosed for material layer C) and flows along an annular conical frustum (not labeled but shown in figs. 1 and 3), wherein the material melts flow into a common annular flow channel 6 that widens like a funnel, with an annular accumulation chamber (defined by accumulation chamber wall 1), in which a displaceable annular piston 4 can reciprocate, and with an annular discharge channel

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(not labeled but shown in figs. 1-3) that follows the annular accumulation chamber and has an annular extrusion orifice (not labeled but shown in figs. 1-3) that can be closed (right side of figs. 1 and 3) by nozzle adjusting cylinder 8. However, Richter (US 4,937,035) does not disclose the gap widths, as recited by the instant claims.

Smith (US 5,262,119) discloses a coextrusion head (figs. 2 and 3) with several essentially coaxially arranged flow channels, each of which is fed from an individual inlet opening with a material melt, which is annularly distributed in a distributor ring and flows along an annular conical frustum, wherein, as viewed in a longitudinal section through the coextrusion head, the gap width in the respective distributor ring is greater in the vicinity of the inlet opening than the gap width on the opposite side from the inlet opening, and that, as viewed in a longitudinal section through the coextrusion head, the gap width in the respective flow channel is smaller in the vicinity of the inlet opening than the gap width on the opposite side from the inlet opening. The mean cross-sectional area of the respective distributor ring is greater than a mean effective cross-sectional area of the corresponding flow channel. Each flow channel opens into a first cylindrical ring, wherein the cross-sectional area of the respective cylindrical ring is greater, preferably twice as great, as the cross-sectional area at the end of the corresponding flow channel.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the device of Richter (US 4,937,035) with the gap widths, the cross-sectional areas and/or the cylindrical rings of Smith (US 5,262,119) because such features are known in the extrusion art and would provide an alternative

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configuration known to be operable in the art. As to claim 32, the angles disclosed therein relate to the dimensions of the claimed apparatus, but where the only difference between the prior art and the claims is a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device is not patentably distinct from the prior art device, In Gardner v. TEC Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984).

9. Claims 29 rejected under 35 U.S.C. 103(a) as being unpatentable over Richter (US 4,937,035) in view of Smith (US 5,262,119) as applied to claims 25-28 and 32 above, and further in view of Becker (US 4,758,144).

Becker (US 4,758,144) discloses a device, wherein a region of quieted flow, which is formed as a common cylindrical ring 5, is provided between a mouth 4, at which several material melts 3a-3e come together, and the point of widening (the most upstream point of channel 10), at which the combined material melts enter the common flow channel 10, which widens like a funnel.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to further modify the device with the common cylindrical ring of Becker (US 4,758,144) because such common cylindrical ring is known in the extrusion art and would provide an alternative configuration known to be operable in the art.

10. Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter (US 4,937,035) in view of Smith (US 5,262,119) as applied to claims 25-28 and 32 above, and further in view of Siard (US 4,472,129).

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Siard (US 4,472,129) discloses a device (fig. 1), wherein an annular groove 38 is provided in an outer wall in the vicinity of a respective flow channel, which is configured as an annular conical frustum (see fig. 1), and the annular groove holds an elastic baffle 44, which can be moved into the annular conical frustum to throttle the flow of the material melt, wherein the inside diameter of the elastic baffle 44 can be varied by means of an adjusting device 56.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to further modify the device with the baffle and adjusting device of Siard (US 4,472,129) because such a modification is well known and conventional in the extrusion art and would provide an alternative configuration known to be operable in the art for enabling throttling of the material flow.

11. Claims 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter (US 4,937,035) in view of Smith (US 5,262,119) as applied to claims 25-28 and 32 above, and further in view of Goron (US 4,297,092).

Goron (US 4,297,092) discloses a device (fig. 2), wherein an inlet opening 53 is connected with a feeding device 54, which is rigidly connected with a coextrusion head 12 and has a feed recess 49, 52, which further conveys the material melt to the inlet opening 53 during the stroke of an annular piston 26, and wherein the material melt is supplied to the feeding device through a rigidly connected extruder line 46, wherein the feed recess has a length equal to the stroke of the annular piston (see fig. 2), wherein the feeding device is designed as an annular segment (see fig. 2).



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It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to further modify the device with the feeding device of Goron (US 4,297,092) because such a modification is well known and conventional in the extrusion art and would provide an alternative configuration known to be operable in the art for enabling feeding of the inlet opening. As to claim 38, it is obvious to duplicate parts for a multiplied effect, St. Regis Paper Co. v. Bemis Co., Inc., 193 USPQ 8.

12. Claims 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter (US 4,937,035).

Richter (US 4,937,035) discloses a device for producing multilayer, coextruded, tubular preforms made of thermoplastic material, with a coextrusion head with several essentially coaxially arranged flow channels (4.A, 4.B, 4.C), each of which is fed from an individual inlet opening (4.1A, 4.1B, 4.1C) with a material melt, which is annularly distributed in a distributor ring (not labeled but shown in the figs. 1 and 3; for example "C" in fig. 3 points to a distributor ring but "C" is disclosed for material layer C) and flows along an annular conical frustum (not labeled but shown in figs. 1 and 3), wherein the material melts flow into a common annular flow channel 6 that widens like a funnel, wherein the funnel-shaped, annular common flow channel is bounded by an inner and outer conical frustum surface, with an annular accumulation chamber (defined by accumulation chamber wall 1), in which a displaceable annular piston 4 can reciprocate, and with an annular discharge channel (not labeled but shown in figs. 1-3) that follows the annular accumulation chamber and has an annular extrusion orifice (not labeled but shown in figs. 1-3) that can be closed (right side of figs. 1 and 3) by nozzle adjusting

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cylinder 8. However, Richter (US 4,937,035) does not disclose the angles, as recited by the instant claims.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the device of Richter with the angles disclosed by the instant claims because such angles relate to the dimensions of the claimed apparatus and because where the only difference between the prior art and the claims is a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device is not patentably distinct from the prior art device, In Gardner v. TEC Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984).

13. Claims 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter (US 4,937,035) in view of Siard (US 4,472,129).

Richter (US 4,937,035) discloses a device for producing multilayer, coextruded, tubular preforms made of thermoplastic material, with a coextrusion head with several essentially coaxially arranged flow channels (4.A, 4.B, 4.C), each of which is fed from an individual inlet opening (4.1A, 4.1B, 4.1C) with a material melt, which is annularly distributed in a distributor ring (not labeled but shown in the figs. 1 and 3; for example “C” in fig. 3 points to a distributor ring but “C” is disclosed for material layer C) and flows along an annular conical frustum (not labeled but shown in figs. 1 and 3), wherein the material melts flow into a common annular flow channel 6 that widens like a funnel, wherein the funnel-shaped, annular common flow channel is bounded by an inner and

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outer conical frustum surface, with an annular accumulation chamber (defined by accumulation chamber wall 1), in which a displaceable annular piston 4 can reciprocate, and with an annular discharge channel (not labeled but shown in figs. 1-3) that follows the annular accumulation chamber and has an annular extrusion orifice (not labeled but shown in figs. 1-3) that can be closed (right side of figs. 1 and 3) by nozzle adjusting cylinder 8. However, Richter (US 4,937,035) does not disclose the baffle and adjusting device, as recited by the instant claims.

Siard (US 4,472,129) discloses a device (fig. 1), wherein an annular groove 38 is provided in an outer wall in the vicinity of a respective flow channel, which is configured as an annular conical frustum (see fig. 1), and the annular groove holds an elastic baffle 44, which can be moved into the annular conical frustum to throttle the flow of the material melt, wherein the inside diameter of the elastic baffle 44 can be varied by means of an adjusting device 56.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the device of Richter (US 4,937,035) with the baffle and adjusting device of Siard (US 4,472,129) because such a modification is well known and conventional in the extrusion art and would provide an alternative configuration known to be operable in the art for enabling throttling of the material flow.

14. Claims 45-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richter (US 4,937,035) in view of Goron (US 4,297,092).

Richter (US 4,937,035) discloses a device for producing multilayer, coextruded, tubular preforms made of thermoplastic material, with a coextrusion head with several

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essentially coaxially arranged flow channels (4.A, 4.B, 4.C), each of which is fed from an individual inlet opening (4.1A, 4.1B, 4.1C) with a material melt, which is annularly distributed in a distributor ring (not labeled but shown in the figs. 1 and 3; for example “C” in fig. 3 points to a distributor ring but “C” is disclosed for material layer C) and flows along an annular conical frustum (not labeled but shown in figs. 1 and 3), wherein the material melts flow into a common annular flow channel 6 that widens like a funnel, with an annular accumulation chamber (defined by accumulation chamber wall 1), in which a displaceable annular piston 4 can reciprocate, and with an annular discharge channel (not labeled but shown in figs. 1-3) that follows the annular accumulation chamber and has an annular extrusion orifice (not labeled but shown in figs. 1-3) that can be closed (right side of figs. 1 and 3) by nozzle adjusting cylinder 8. However, Richter (US 4,937,035) does not the feeding device, as recited by the instant claims.

Goron (US 4,297,092) discloses a device (fig. 2), wherein an inlet opening 53 is connected with a feeding device 54, which is rigidly connected with a coextrusion head 12 and has a feed recess 49, 52, which further conveys the material melt to the inlet opening 53 during the stroke of an annular piston 26, and wherein the material melt is supplied to the feeding device through a rigidly connected extruder line 46, wherein the feed recess has a length equal to the stroke of the annular piston (see fig. 2), wherein the feeding device is designed as an annular segment (see fig. 2).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the device of Richter (US 4,937,035) with the feeding device of Goron (US 4,297,092) because such a modification is well known and

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conventional in the extrusion art and would provide an alternative configuration known to be operable in the art for enabling feeding of the inlet opening. As to claim 48, it is obvious to duplicate parts for a multiplied effect, St. Regis Paper Co. v. Bemis Co., Inc., 193 USPQ 8.

***Allowable Subject Matter***

15. Claims 30 and 31 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

16. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not teach or reasonably suggest, the device as recited by claims 30 and 31, particularly including the combination of the common cylindrical ring and the first cylindrical rings.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSEPH LEYSON whose telephone number is (571)272-5061. The examiner can normally be reached on M-F 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gupta Yogendra can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert B. Davis/  
Primary Examiner, Art Unit 1791  
8/31/09

/J. L./  
Examiner, Art Unit 1791